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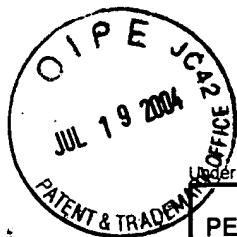
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Erw

PTO/SB/61 (11-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

Docket Number (Optional)

First Named Inventor: **Aman Safaei**

Art Unit: **2127**

Application Number: **10/660,409**

Examiner: **Not yet assigned**

Filed: **September 10, 2003**

Title: **ON-LINE SALES ANALYSIS SYSTEM AND METHOD**

Attention: Office of Petitions

Mail Stop Petition

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

NOTE: If information or assistance is needed in completing this form, please contact
Petitions Information at (703) 305-9382.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION.

NOTE: A grantable petition requires the following items:

- (1) Petition fee.
- (2) Reply and/or issue fee.
- (3) Terminal disclaimer with disclaimer fee-required for all utility and plant applications filed before June 8, 1995, and for all design applications; and
- (4) Adequate showing of the cause of unavoidable delay.

1. Petition fee

☐ Small entity - fee \$ _____ (37 CFR 1.17(l)). Applicant claims small entity status.
See 37 CFR 1.27.

☒ Other than small entity - fee \$ **110.00** (37 CFR 1.17(l)).

2. Reply and/or fee

A. The reply and/or fee to the above-noted Office action in the form of
formal drawings and Reply (identify the type of reply):

☐ has been filed previously on _____

☒ is enclosed herewith.

07/20/2004 SZEWDIE1 00000095 041679 10660409

B. The issue fee of \$ _____

01 FC:1452 110.00 DA

☐ has been filed previously on _____

☐ is enclosed herewith.

[Page 1 of 3]

This collection of information is required by 37 CFR 1.137(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

3. Terminal disclaimer with disclaimer fee

- ☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ _____ for a small entity or \$ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. An adequate showing of the cause of the delay, and that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition under 37 CFR 1.137(a) was unavoidable, is enclosed.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

7/16/04
Date

Joseph A. Powers
Signature

215-979-1842
Telephone Number

Joseph A. Powers
Typed or printed name

47.006
Registration Number, if applicable

Duane Morris LLP
Address

One Liberty Place, Philadelphia, PA 19103
Address

- Enclosure ☒ Fee Payment
- ☒ Reply
- ☐ Terminal Disclaimer Form
- ☒ Additional sheets containing statements establishing unavoidable delay
- ☒ Return Postcard

CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is being:

- ☒ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to **Mail Stop Petition**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

7/16/04
Date

Elizabeth Orleman
Signature

Elizabeth Orleman
Typed or printed name of person signing certificate

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

NOTE: The following showing of the cause of unavoidable delay must be signed by all applicants or by any other party who is presenting statements concerning the cause of delay.

7/16/04
Date

Joseph A Powers
Signature

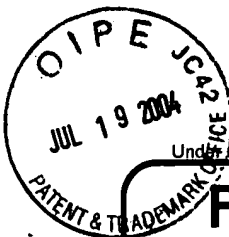
47,006
Registration Number, if applicable

Joseph A. Powers
Typed or printed name

(In the space provided below, please explain in detail the reasons for the delay in filing a proper reply.)

- See attached Reply and Statement of Cause of Unavoidable Delay

(Please attach additional sheets if additional space is needed.)



PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 110.00)

Complete if Known

Application Number	10/660,409
Filing Date	September 10, 2003
First Named Inventor	Adam Safaei et al.
Examiner Name	
Art Unit	2127
Attorney Docket No.	W1200-00041

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

04-1679

Duane Morris LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)				(\$)	

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)				(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	110.00
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 110.00)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)

Joseph A. Powers

Registration No.
(Attorney/Agent)

47,006

Telephone 215-979-1842

Signature

Joseph A. Powers

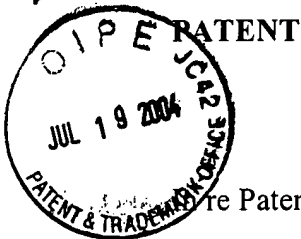
Date

7/16/04

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Attorney Docket No.: W1200-00041

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application No. 10/660,409

Serial No.: 10/660,409

Filed: September 10, 2003

Inventor(s): Safaei et al.

For: **ON-LINE SALES ANALYSIS SYSTEM AND METHOD**

REPLY AND STATEMENT OF CAUSE OF UNAVOIDABLE DELAY

Mail Stop PETITION
Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

Sir:

I. Unavoidable Delay

The above-identified application expired unavoidably through Petitioners' failure to respond to a Notice to File Missing Parts of Nonprovisional Application dated December 2, 2003. The delay in responding to the Notice was unavoidable since reasonable care was taken to ensure the application was in good standing. In addition, this petition was filed promptly after Petitioners discovered that there was an outstanding Notice and that this application expired. Petitioners respectfully submit (a) a check in the amount of \$110.00 to cover the petition fee on grounds of unavoidable delay under §1.17(l) and (b) formal drawings in response to the Notice. Petitioner requests that the drawings be accepted and that this application be revived.

The above-identified patent application was filed on September 10, 2003. Receipt of the application was confirmed by the Patent Office via return postcard received by Applicants law firm (Duane Morris) on September 18, 2004.

On or about June 24, 2004, Applicants' undersigned attorney reviewed this application file to determine what, if any, art should be cited in an information disclosure statement. As part of the review, Applicants' attorney accessed the application data for this application via PAIR. For the first time, Applicants' attorney learned that a "Notice" had been mailed from the Patent Office dated December 2, 2003. Applicants' attorney checked the file folder, the law firm's docketing system and correspondence with the Applicants and found no original or copy of the Notice nor any correspondence to the Applicants referencing the Notice.

It is Applicants attorneys' regular practice that all mail received from the Patent Office be first docketed by a docketing clerk and then distributed to the assigned attorney. No docket entry was made indicating that the Notice was ever received from the Patent Office.

On June 28, 2004, at the request of the undersigned, a paralegal – Elizabeth Orleman – contacted the Office of Initial Patent Examination (OIPE) and requested a copy of the Notice. An employee at OIPE informed Ms. Orleman that the Notice could not be faxed but would be mailed. No mailed notice has been received by the undersigned. Ms. Orleman again contacted OIPE on July 13, 2004 and requested a copy of the Notice. This time, an employee agreed to fax the Notice to Ms. Orleman. The fax copy of the Notice was received by Ms. Orleman on July 13, 2004 and immediately provided to the undersigned. July 13, 2004 was the first time that the undersigned or any member of the undersigned's firm learned of the contents of the Notice.

In support of the foregoing, a copy of the PAIR information page for the above-identified application reviewed by the undersigned and dated June 24, 2004 is submitted. A copy of the facsimile dated July 13, 2004 including the Notice and referenced above is also enclosed.

It is submitted that the foregoing establishes that the delay in responding to the Notice was unavoidable since reasonable care was taken to ensure the application was in good standing.

II. Reply to Notice to File Missing Parts of Nonprovisional Application

The Notice dated December 2, 2003 indicates that the following submissions are required:

- (i) A new oath or declaration that is signed by the inventors and indicating the residence and citizenship of each inventor;
- (ii) Replacement drawings sheets having compliant margins, specifically FIG. 8; and
- (iii) An abstract of the technical disclosure.

In response to the request for replacement drawings, Applicants submit herewith a set of formal drawings, including drawings sheets 1-8. Applicants submit that the drawings submission fully complies with the requirements of the Notice.

With respect to the requirement for a signed oath/declaration with residence and citizenship and for an abstract, Applicants submit herewith the following documents:

(i) a true and correct copy from Applicants' attorneys' files of the application as filed with the Patent office, including:

- (a) Certification Under 37 CFR 1.10;
- (b) Utility Patent Application Transmittal;
- (c) Fee Transmittal;

- (d) Specification Pages 1-22, including Abstract Page 22;
 - (e) Drawings Sheets 1-8; and
 - (f) Executed Oath and Declaration dated September 10, 2003; and
- (ii) Return Post Card.

It is Applicants' attorneys practice to make exact copies of all papers filed with the U.S. Patent Office. As indicated by documents (i) and (ii), an Abstract was submitted with the application filed September 10, 2003 as well as a signed declaration by both inventors indicating each inventor's residence and citizenship.

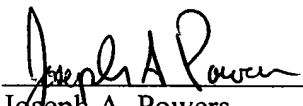
Therefore, it is submitted that the Abstract and inventor declaration requested by the Notice were submitted with the patent application as filed. No oath or declaration surcharge as indicated in the Notice is required to be submitted herewith.

Applicants submit that this Reply fully complies with the requests set forth in the Notice.

If any additional fees are required, please charge Deposit Account No. 04-1679.

Respectfully submitted,

Dated: 7/16/04



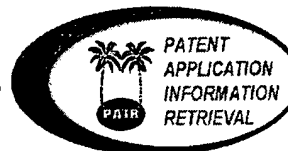
Joseph A. Powers
Registration No. 47,006
Attorney for Petitioners
(215) 979-1842

DUANE MORRIS LLP
One Liberty Place
Philadelphia, PA 19103-7396

W1200-00041



United States Patent and Trademark Office

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PATENT APPLICATION INFORMATION RETRIEVAL

Search results for application number: 10/660,409			
Application Number:	10/660,409	Customer Number:	8933
Filing or 371(c) Date:	09-10-2003	Status:	Application Undergoing Preexam Processing
Application Type:	Utility	Status Date:	09-15-2003
Examiner Name:	-	Location:	ELECTRONIC
Group Art Unit:	2127	Location Date:	-
Confirmation Number:	5830	Earliest Publication No:	-
Attorney Docket Number:	W1200-00041	Earliest Publication Date:	-
Class/ Sub-Class:	709/-	Patent Number:	-
First Named Inventor:	Aman Safaei ,	Issue Date of Patent:	-
Title Of Invention:	On-line sales analysis system and method		

Search Options

Assignments
Continuity Data
Image File Wrapper
Publication Review

File History	
Date	Contents Description
12-02-2003	Notice Mailed--Application Incomplete--Filing Date Assigned
11-21-2003	Cleared by OIPE CSR
10-15-2003	IFW Scan & PACR Auto Security Review
09-10-2003	Initial Exam Team nn

6/23/04 Office of Initial Patent Exam will
send copy of Notice today



Patent Technology Center 1700

Facsimile Transmission

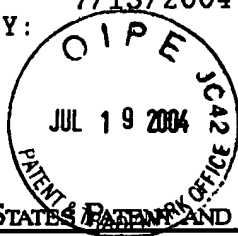
To: Name: Liz Orleman
 Company:
 Fax Number: 2159791020
 Voice Phone:

From: Name:
 Official Fax Number: (703) 872-9310
 Official After Final Fax Number: (703) 872-9311
 Voice Phone:

37 C.F.R. 1.6 sets forth the types of correspondence that can be communicated to the Patent and Trademark Office via facsimile transmissions. Applicants are advised to use the certificate of facsimile transmission procedures when submitting a reply to a non-final or final Office action by facsimile (37 CFR 1.8(a)).

Fax Notes:

Date and time of transmission: Tuesday, July 13, 2004 1:57:02 PM
Number of pages including this cover sheet: 03



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/660,409	09/10/2003	Aman Safaei	W1200-00041

CONFIRMATION NO. 5830

FORMALITIES LETTER



OC000000011397082

08933
DUANE MORRIS, LLP
ATTN: WILLIAM H. MURRAY
ONE LIBERTY PLACE
1650 MARKET STREET
PHILADELPHIA, PA 19103-7396

Date Mailed: 12/02/2003

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121 are required. The drawings submitted are not acceptable because:
 - ✓ ■ The drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch). See Figures(s) 8.
- An abstract of the technical disclosure not exceeding 150 words in length and commencing on a separate sheet in compliance with 37 CFR 1.72(b) is required. An abstract was not provided for this application.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is **\$130** for a Large Entity

- \$130 Late oath or declaration Surcharge.

Items Required To Avoid Processing Delays:

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A new oath or declaration, identifying this application number is required. The oath or declaration does not comply with 37 CFR 1.63 in that it:
- does not identify the residence (e.g., city and either state or foreign country) of each inventor.
- does not identify the citizenship of each inventor.

Replies should be mailed to: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

A copy of this notice MUST be returned with the reply.

Customer Service Center
Initial Patent Examination Division (703) 3081202
PART 1 - ATTORNEY/APPLICANT COPY

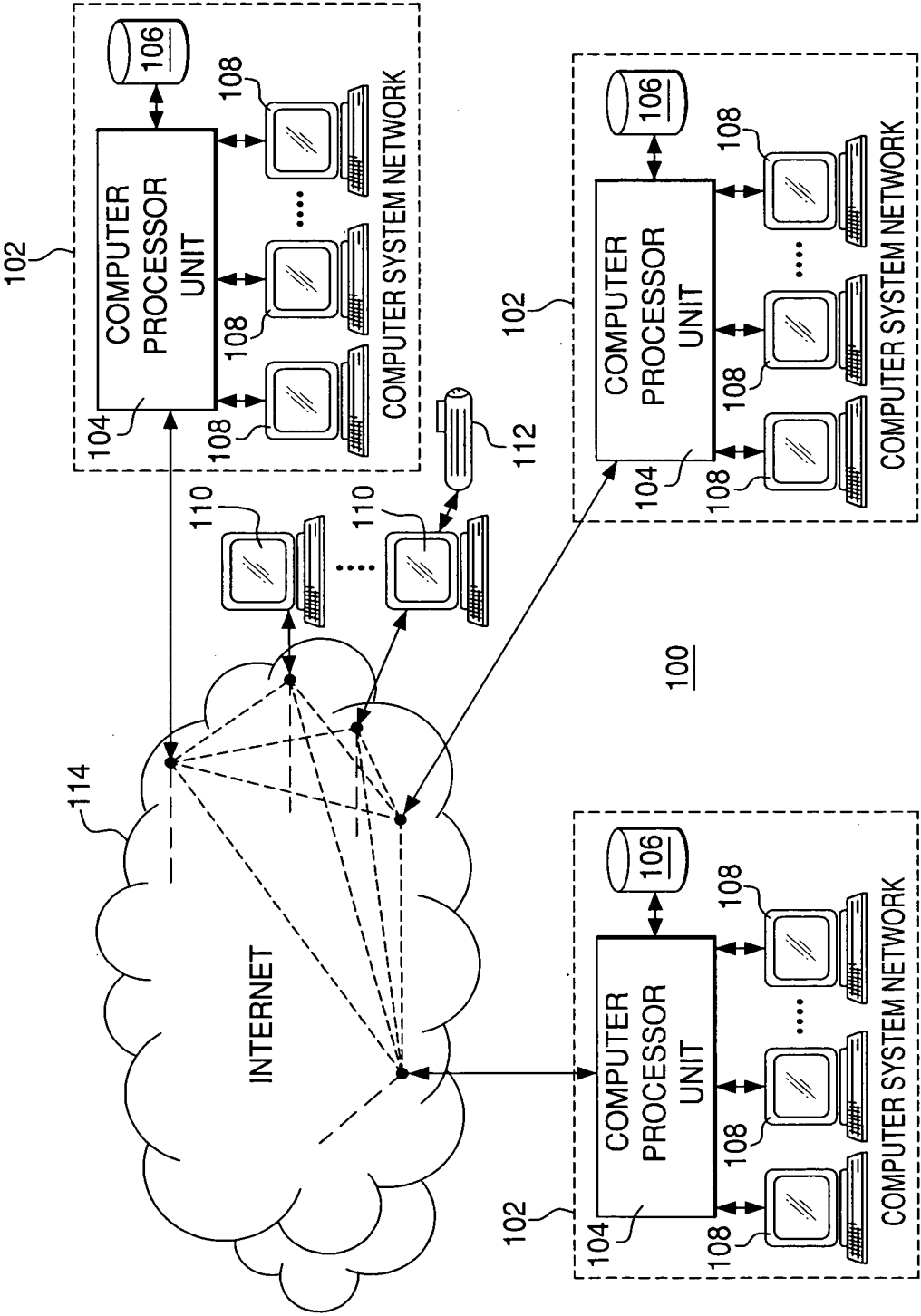


FIG. 1



208b

208c

212

218

220

Home

Sales Analysis

Report

Exit

208

Search by: Use these criteria:

Enter letters:

Keeping sorted order: ☐

Summary

208a

Select one

Contains

Paging: 15

Start

210

202

Total Sales: \$14,930,119.00

Average of Transaction: \$32.13

Order By sumSales desc

204

216

214

State	Name	City	Zip Code	Cumulative Sales (\$)	Transaction (#)	Index (%)	Store ID	Month	Quarter	Year
ME	SHAW'S NORTHGATE, PORTLAND	PORTLAND	04103	122,863.50	760	503.13	104587	-	-	-
ME	HANNAFORD SUPERMARKET #225	BIDDEFORD	04005	118,098.50	763	481.71	104464	-	-	-
ME	EIGHT CORNERS MARKET	SCARBOROUGH	04074	117,705.50	674	543.51	109837	-	-	-
ME	HANNAFORD SUPERMARKET #265	LEWISTON	04240	115,605.50	761	472.78	104769	-	-	-
ME	VICTOR NEWS COMPANY	LEWISTON	04240	107,608.00	699	479.11	102550	-	-	-
ME	SHAW'S WESTGATE, PORTLAND	PORTLAND	04102	99,985.50	755	412.15	104600	-	-	-
ME	LISBON STREET NEWS INC	LEWISTON	04240	98,254.00	710	430.68	101564	-	-	-
ME	DAY'S NEWSTAND & VARIETY	BRUNSWICK	04011	97,012.50	727	415.30	100479	-	-	-
ME	SHAW'S, SCARBOROUGH	SCARBOROUGH	04074	80,338.50	689	362.89	113157	-	-	-

200

FIG. 2

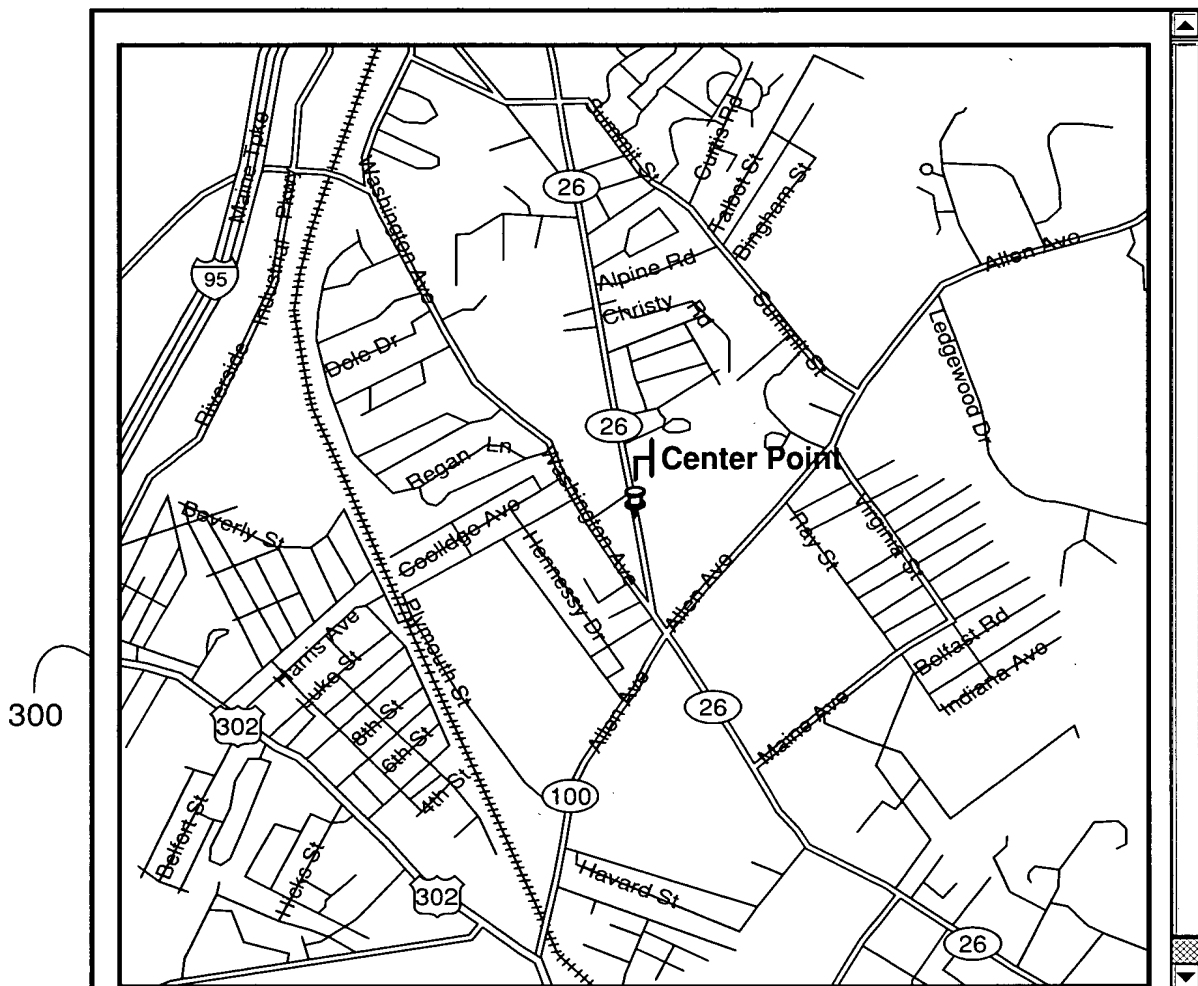


FIG. 3

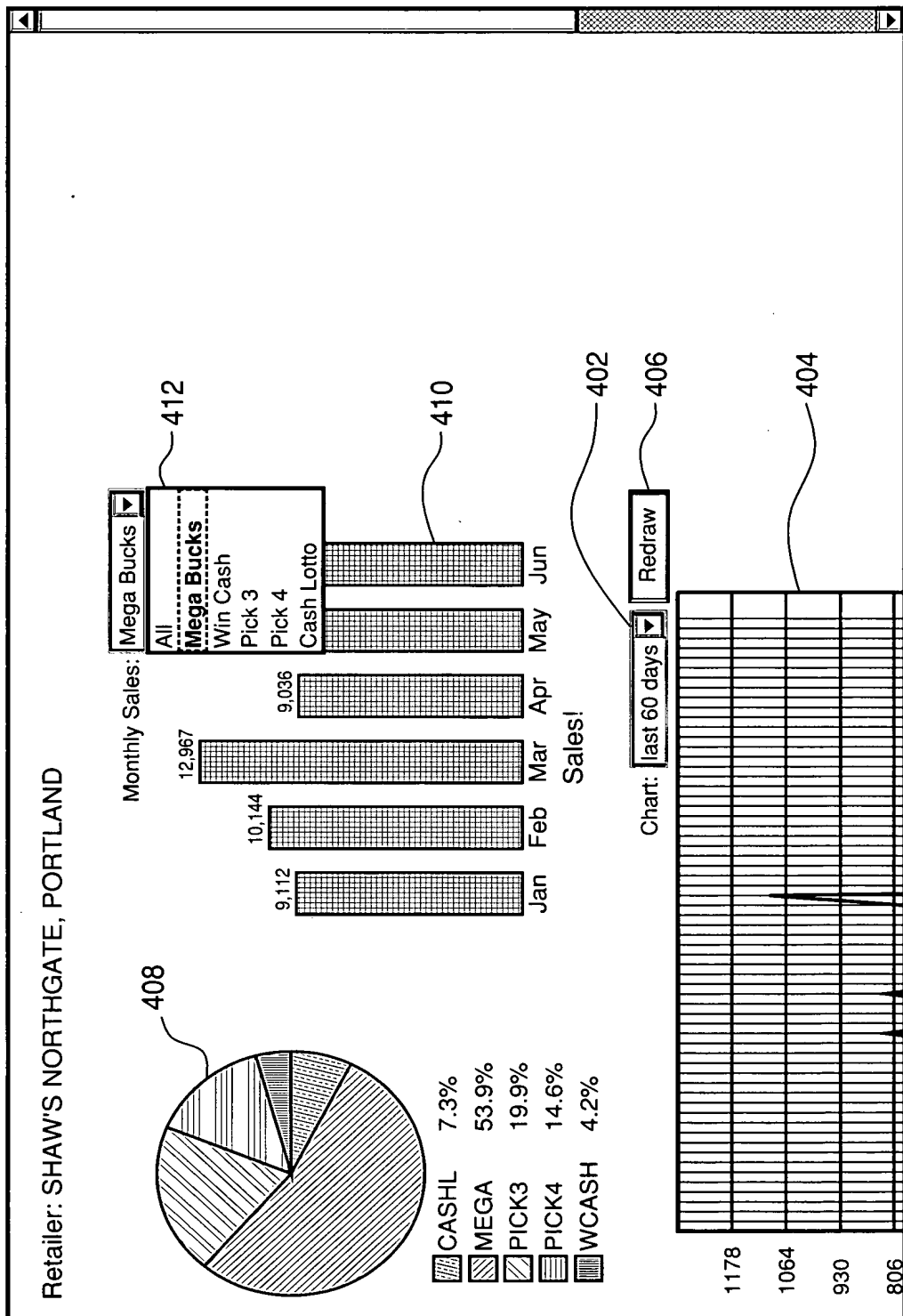


FIG. 4

208b
208c 212

Home
Sales Analysis
Report
Exit

Search by: Use these criteria: Enter letters: 1041

Select one ▼ Begins With: ▼

Zip Begin With '041'

Total Sales: \$1,981,001.50 Average of Transaction: \$50.45 214

Order By City desc 204A

Keeping sorted order: ☒ Summary

Continue New Search

208
208a
202A
206
200A

State	Name	City	Zip Code	Cumulative Sales (\$)	Transaction (#)	Index (%)	Store ID	Month	Quarter	Year
ME	BROADWAY REDEMPTION	SOUTH PORTLAND	04106	41,424.00	667	123.10	100839	-	-	-
ME	CAMPBELL'S MARKET	SOUTH PORTLAND	04106	41,602.00	700	117.80	100848	-	-	-
ME	FIRST STOP	SOUTH PORTLAND	04106	20,104.00	651	61.21	100857	-	-	-
ME	JETPORT GAS & CONVENIENCE	SOUTH PORTLAND	04106	16,292.00	569	59.09	101073	-	-	-
ME	CUMBERLAND FARMS #5573	SOUTH PORTLAND	04106	13,075.00	550	47.12	104541	-	-	-
ME	SHAW'S MILL CREEK, SO. PORT	SOUTH PORTLAND	04106	59,527.00	690	171.00	104578	-	-	-
ME	HANNAFORD SUPERMARKET #279	SOUTH PORTLAND	04106	53,905.00	730	146.37	104619	-	-	-
ME	HANNAFORD SUPERMARKET #279	SOUTH PORTLAND	04106	77,031.00	742	205.78	104628	-	-	-

FIG. 5



208a 208b 218 208c 212 220

Home Sales Analysis Report Exit

208 Search by: Use these criteria: Enter letters: Paging: 15 New Search

208a Zip Begins With 04103 Continue

222 Date From: 01/01/2002 Date To: 12/31/2002 Show Sales 224

202B Zip Begin With '04103' Average of Transaction: \$57.92 202B

Total Sales: \$506,380.00 Order By sumSales desc

State	Name	City	Zip Code	Cumulative Sales (\$)	Transaction (#)	Index (%)	Store ID
ME	SHAW'S NORTHGATE, PORTLAND	PORTLAND	04103	122,836.50	760	279.09	104587
ME	SHAW'S PINE TREE, PORTLAND	PORTLAND	04103	68,300.50	749	157.43	104596
ME	CUMBERLAND FARMS #5604	PORTLAND	04103	58,867.00	740	137.33	108055
ME	ANANIA'S VARIETY	PORTLAND	04103	34,181.50	651	90.65	102152
ME	ANANIA'S WASHINGTON AVE	PORTLAND	04103	31,076.50	607	88.38	127458
ME	7 - ELEVEN #32541A	PORTLAND	04103	27,537.00	650	73.14	127956
ME	EXIT & MOBIL MART	PORTLAND	04103	25,927.00	619	72.31	118285
ME	CUMBERLAND FARMS #5613	PORTLAND	04103	22,950.00	604	65.60	104523
ME	PAPA'S PLACE	PORTLAND	04103	22,626.50	597	65.43	100055
ME	QUALITY SHOP	PORTLAND	04103	21,825.00	629	59.90	101126
ME	MORAN'S MARKET	PORTLAND	04103	21,252.50	596	61.56	100046
ME	CUMBERLAND FARMS #5570	PORTLAND	04103	19,210.50	613	54.10	104532

200B

FIG. 6

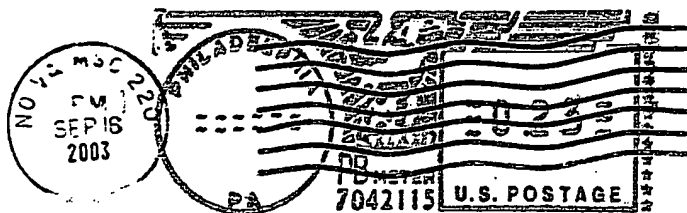


8/8

Rows: 20				
Name	Month	Sales (\$)	Percent (%)	
3-D VARIETY	1	5,328.50	0.036	
3-D VARIETY	2	5,492.00	0.037	
3-D VARIETY	3	6,223.50	0.042	
3-D VARIETY	4	5,184.50	0.035	
3-D VARIETY	5	5,162.00	0.035	
3-D VARIETY	6	5,307.00	0.036	
3-D VARIETY	7	2,120.50	0.014	
3-D ENERGY/RB'S RESTAURANT	1	804.00	0.005	
3-D ENERGY/RB'S RESTAURANT	2	1,141.50	0.008	
3-D ENERGY/RB'S RESTAURANT	3	1,120.50	0.008	
3-D ENERGY/RB'S RESTAURANT	4	797.50	0.005	
3-D ENERGY/RB'S RESTAURANT	5	646.00	0.004	
3-D ENERGY/RB'S RESTAURANT	6	564.00	0.004	
3-D ENERGY/RB'S RESTAURANT	7	200.00	0.001	
3-G FOOD MART	1	853.50	0.006	
3-G FOOD MART	2	1,043.00	0.007	
3-G FOOD MART	3	2,021.00	0.014	
3-G FOOD MART	4	1,317.00	0.009	
3-G FOOD MART	5	838.00	0.006	
3-G FOOD MART	6	900.00	0.006	

800

FIG. 8



DUANE MORRIS LLP

One Liberty Place, 42nd Floor
Philadelphia, PA 19103-7396



UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No.: W1200-00041
In re application of: Aman Safaei, et al.
Title: On-Line Sales Analysis System and Method
Express Mail Label No. EV 175963495 US

DOCKETED

The Patent Office acknowledges and has stamped hereon the date of receipt of the following items:

Certification Under CFR 1.10; Utility Patent Application Transmittal; Fee Transmittal; Patent Application (22 pages spec./8 sheets drwgs); Declaration and Power of Attorney; and check in the amount of \$1,272.00.

JAP:jlb

September 10, 2003

16235 U.S. PTO
10/660409
09/10/03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of: AMAN SAFAEI, et al..

Serial No.: Not Yet Assigned

Examiner: Not Yet Assigned

Filed: 09/10/2003

Group Art Unit: Not Yet Assigned

For: **ON-LINE SALES ANALYSIS SYSTEM AND METHOD**

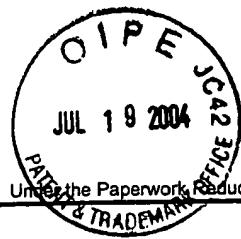
CERTIFICATION UNDER 37 C.F.R. 1.10

I hereby certify that this document (along with the enclosed Patent Application Transmittal and any documents referred to therein) is being deposited with the United States Postal Service on the date shown below with sufficient postage as "Express Mail Post Office to Addressee" Mailing Label Number EV 175963495 US to the following:

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dated: September 10, 2003

Joseph A. Powers
Joseph A. Powers



UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	W1200-00041
First Inventor	Safaei et al.
Title	ON-LINE SALES ANALYSIS SYSTEM AND METHOD
Express Mail Label No.	EV175963495US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- ☐ Applicant claims small entity status.
See 37 CFR 1.27.
- ☒ Specification [Total Pages **22**]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **8**]
- Oath or Declaration [Total Pages **3**]
 - ☒ Executed (original or copy)
 - ☐ Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

- ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
- Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - ☐ Computer Readable Form (CRF)
 - Specification Sequence Listing on:
 - ☐ CD-ROM or CD-R (2 copies); or
 - ☐ paper
 - ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

- ☐ Assignment Papers (cover sheet & document(s))
- ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
- ☐ English Translation Document (if applicable)
- ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
- ☐ Preliminary Amendment
- ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
- ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
- ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- ☒ Other: Certification Under 37 CFR 1.10

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____ / _____

Prior application information:

Examiner: _____

Group Art Unit: _____

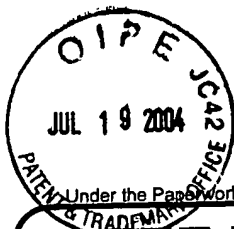
For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

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(Insert Customer No. or Attach bar code label here)

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Signature	<i>Joseph A. Powers</i>	Date	09/10/2003



PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 1,272.00

Complete if Known

Application Number	
Filing Date	09/10/2003
First Named Inventor	Safaei
Examiner Name	
Art Unit	
Attorney Docket No.	W1200-00041

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit Account Number
Deposit Account Name

04-1679

Duane Morris LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	750.00
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 750.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	35	-20**=	15	x	18	=270
Independent Claims	6	-3**=	3	x	84	=252
Multiple Dependent					0	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 1,272.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Joseph A. Powers, Esquire	Registration No. (Attorney/Agent)	47,006	Telephone	215-979-1842
Signature		Date	09/10/2003		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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**ON-LINE SALES ANALYSIS SYSTEM AND METHOD**

[0001] This application claims the benefit of U.S. Provisional Application No. 60/410,659, filed September 13, 2002 and U.S. Provisional Application No. 60/410,658, filed September 13, 2002.

FIELD OF THE INVENTION

[0002] The present invention relates generally to computer networks and the like, and more particularly to systems and methods for enabling lottery administrators to analyze lottery sales data, particularly sales data for on-line and instant lottery tickets.

BACKGROUND OF THE INVENTION

[0003] Lottery sales are an important source of revenue for many states. However, the teachings of the prior art do not provide tools that lottery administrators can use to easily evaluate sales data relevant to instant and on-line lottery ticket sales by lottery agents or retailers.

SUMMARY OF THE INVENTION

[0004] In some embodiments, a computer implemented method for processing lottery sales data comprises the steps of: enabling a user of a computer to query data representing lottery ticket sales for a plurality of lottery retailers based on at least one criterion from a predetermined list of criteria; and causing display of a table on a computer, the table containing a listing of a subset of lottery retailers from the plurality of lottery retailers that meet the at least one criterion, the table further containing data representing lottery ticket sales associated with the subset of retailers.

[0005] In some embodiments, a computer implemented method of processing lottery sales data comprises the steps of: causing display of a table on a computer, the table containing data representing lottery ticket sales for a plurality of lottery retailers, wherein the table contains values of an index that compares sales performance of each of the lottery retailers listed in the table; enabling a user of the computer to query the data in the table based on at least one criterion from a predetermined list of criteria; and

modifying the table to contain a listing of a subset of lottery retailers from the plurality of lottery retailers that meet said at least one criterion, said table further containing data representing lottery ticket sales associated with said subset of retailers, wherein modified values are displayed comparing sales performance of the subset of retailers.

[0006] The above and other features of the present invention will be better understood from the following detailed description of the preferred embodiments of the invention that is provided in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The accompanying drawings illustrate preferred embodiments of the invention, as well as other information pertinent to the disclosure, in which:

FIG. 1 is a stylized overview of a system of interconnected computer networks;

FIG. 2 shows a Sales Analysis page displayed by the system of FIG. 1;

FIG. 3 shows a map indicating a retailer location displayed by the system of FIG. 1;

FIG. 4 shows a sales summary for an individual retailer displayed by the system of FIG. 1;

FIG. 5 shows a Sales Analysis page displayed by the system of FIG. 1 for a subset of retailers;

FIG. 6 shows a Report Page displayed by the system of FIG. 1;

FIG. 7 shows a summary report displayed by the system of FIG. 1; and

FIG. 8 shows a sales summary displayed by the system of FIG. 1.

DETAILED DESCRIPTION

[0008] U.S. Provisional Application Nos. 60/410,659 and 60/410,658, both filed September 13, 2003, are incorporated by reference herein in their entirety.

[0009] The Internet is a worldwide system of computer networks - a network of networks in which a user at one computer can obtain information from any other computer and communicate with users of other computers. The most widely used part of the Internet is the World Wide Web (often-abbreviated "WWW" or called "the Web"). One of the most outstanding features of the Web is its use of hypertext, which is a

method of cross-referencing. In most Web sites, certain words or phrases appear in text of a different color than the surrounding text. This text is often also underlined. Sometimes, there are hot spots, such as buttons, images or portions of images that are "clickable." Clicking on hypertext or a hot spot causes the downloading of another web page via a protocol such as hypertext transport protocol (HTTP). Using the Web provides access to millions of pages of information. Web "surfing" is done with a Web browser, the most popular of which presently are Netscape Navigator and Microsoft Internet Explorer. The appearance of a particular website may vary slightly depending on the particular browser used. Recent versions of browsers have "plug-ins," which provide animation, virtual reality, sound and music and interpreted programs (e.g., applets) may be run within the browser.

[0010] FIG. 1 shows a system 100 of interconnected computer system networks 102. Each computer system network 102 contains a corresponding local computer processor unit 104, which is coupled to a corresponding local data storage unit 106, and local network user terminals 108. A computer system network 102 may be a local area network (LAN) or part of a wide area network (WAN), for example. The local computer processor units 104 are selectively coupled to a plurality of user devices 110 through Internet 114 described above. Each of the plurality of user devices 110 and local user terminals 108 (collectively, user terminals) may have various devices connected to their local computer systems, such as scanners, barcode readers, printers, finger print scanners, mouse devices, and other interface devices 112.

[0011] A user device 110, programmed with a Web browser or other software, locates and selects (such as by clicking with a mouse) a particular Web page, the content of which is located on the local data storage unit 106 of a computer system network 102, in order to access the content of the Web page. The Web page may contain links to other computer systems and other Web pages.

[0012] The user device 110 may be a microprocessor-based computer terminal, a pager that can communicate through the Internet using the Internet Protocol (IP), a Kiosk with Internet access, a connected personal digital assistant or PDA (e.g., a PALM device manufactured by Palm, Inc. or IPAQ device available from Compaq) or other device

capable of interactive network communications, such as an electronic personal planner. User device 110 may also be a wireless device, such as a hand-held unit (e.g., cellular telephone) that connects to and communicates through the Internet using the wireless access protocol (WAP).

[0013] The system and method of the present invention may be implemented by utilizing at least a part of the system 100 described above in connection with FIG. 1. It should be apparent to one of ordinary skill that the system may be incorporated in a LAN, in a WAN, or through an Internet 114 based approach, such as through a hosted or non-hosted application service, or through a combination thereof. The functionality of the method may be programmed and executed by at least one computer processor unit 104, with necessary data and graphical interface pages as described below stored in and retrieved from a data storage unit 106. A user can access this functionality using a user device 110 or computer terminal 108.

[0014] Described below are a sales analysis and reporting system and method preferably embodied utilizing the network structure described above, i.e., as an application service provided through the Internet in some embodiments. The system and method allow state lottery administrators, particularly their sales representatives and marketing agents, to easily evaluate sales data relevant to instant and on-line lottery ticket sales by lottery agents or retailers (hereinafter, "retailers"). The term "on-line" lottery ticket means a ticket usable in lottery games sold most prominently at convenience stores, for example, where a lottery retailer uses a lottery terminal connected to a backend lottery processor via a communications network to issue lottery tickets to customers. Such games are distinguishable from so called "instant" or "scratch-off" lottery tickets. Examples of on-line games include the ubiquitous "pick 3," "pick 4" and "pick 6" games. The system described below provides a powerful tool for lottery administrators to examine and evaluate sales data for all or some of the retailers, generate reports and utilize the data in various decision making processes, such as franchise location and allocation.

[0015] Embodiments of a system and method are described below using various Graphical User Interfaces (GUIs) including Web pages caused to be displayed to a user

on a computer. It should be understood that various selectable options presented by the Web pages correspond to functionality provided by a computer processor unit 104 that may be programmed in any number of ways and that this disclosure should not be limited to any particular programming language or methodology. In some embodiments, the system is implemented to include a commercially available off-the-shelf database management system (DBMS) to manage the data, such as, for example, SQL Server by Microsoft Corporation of Redmond, WA, or Oracle9i from Oracle Corporation of Redwood Shores, CA or DB2 from IBM Corporation of Armonk, NY.

[0016] FIG. 2 is a display of a graphical user interface (GUI) page 200 that enables a lottery administrator user to access the functionality of the system and methods described herein. In one embodiment, the user can access the Web page 200 of FIG. 2 through Internet 114 and preferably using a user name and password associated with data available to the user. Lottery sales data relevant to individual instant and on-line lottery games, such as "pick 3," "pick 4," and "pick 6" games, for various states are entered and stored in a data storage unit 106 for retrieval and use. The lottery sales data are periodically collected in a database in data storage unit 106, preferably on a daily basis. This data may be exported from a central lottery processor that logs lottery ticket sales made by the various lottery terminals at retailers distributed through, for example, a state. Sales data may include the type of ticket(s) sold (e.g., "pick 3" or "pick 4" or instant), the sales amount in dollars, the date of sales, the number of tickets sold, and the lottery retailer that sold the ticket(s). This information can then be accessed, parsed, organized and reviewed by a lottery administrator as described below.

[0017] Referring again to selectable "Sales Analysis" option 218, a "Sales Analysis" GUI 200 (displayed by selecting "Sales Analysis" button 218) is shown displayed in a browser window. In this example, the lottery administrator user has access to lottery sales data for Maine (ME). The option allows the administrator to review, parse and organize the lottery data pertinent to that state's (and/or other states') games. The display preferably defaults to listing sales data for each lottery retailer in the state. The list of retailers is searchable and reorganizable in much the same way as the graphical user interface described in U.S. Published Patent Application 2002/0077712 to

Safaei et al., entitled "System and Method for Providing Return on Investment Data for Wagers," published June 20, 2002, the entirety of which is hereby incorporated by reference herein.

[0018] The display 200 shows the cumulative "Total Sales" 202 for all lottery games for the state (or group of states depending on the user's access rights) over a predefined time period, such as from January 1 of the current year to the current date. The "Total Sales" value can be calculated from the sales data described above that is periodically accumulated in data storage unit 106. The "Average of Transaction" value 204 for the retailers for that period of time is also indicated. This value can be calculated from the aforementioned sales data by dividing the "Total Sales" number by the total number of transactions for the defined period. In some embodiments, the sales of a lottery game in a day is considered a "transaction." By way of example, if a retailer sells one "Pick 3" ticket for \$1 and one "Pick 4" ticket for \$1 on a given day, that constitutes two transactions for a total of \$2. The average transaction value for this retailer is \$1, i.e., \$2 in total sales divided by two transactions. If another retailer on a given day sells one hundred "Pick 3" tickets for \$100, one hundred "Pick 4" tickets for \$100 and one hundred "Pick 6" tickets for \$100, that constitutes three total transactions for the day for a total of \$300. The second retailer, therefore, has an average transaction value of \$100, i.e., \$300 in total sales divided by three transactions.

[0019] Also shown in the display 200 of FIG. 2 is a table with column headings 206 including "State," "Name," "City," "Zip Code," "Cumulative Sales (\$)," "Transaction (#)," "Index (%)" and "Store ID." "State" indicates the state of a lottery retailer, for example Maine (ME). "Name" identifies the name of a lottery retailer, and "City" and "Zip Code" identify the city name and zip code of the named lottery retailer, respectively. "Cumulative Sales" identifies the total cash value of sales for the lottery retailer over the defined period of time (here the default period of time), and "Transaction Number" indicates the total number of lottery transactions that produced the indicated sales. The retailers average transaction could be calculated by dividing the Cumulative Sales by the Transaction Number. For example, Shaw's Northgate Portland would have

an average transaction value of approximately \$160; that is an average of \$160 per day per transaction.

[0020] The “Index (%)” identifies a normalized percentage comparing the individual lottery retailer’s sales relative to the average retailer in the displayed group. For example, the value “503.13” in the first row represents that the “Shaw’s Northgate, Portland” retailer performed 503.13% better (or approximately 5 times better) than the average lottery agent represented in the chart (in this case, the average lottery agent in the state of Maine). In one embodiment, the comparison is based on the average transaction value for the given time period, i.e., the sales for the time period divided by the number of transactions.

[0021] Although “Shaw’s Northgate, Portland” did more gross sales than “Eight Corner’s Market,” the display indicates that Eight Corners Market has a higher index percentage. Eight Corners Market did almost the same amount of gross sales as Shaw’s, but on significantly fewer transactions (674 vs. 760 transactions). As mentioned, a transaction is based on the sale of a game on a given day (i.e., the sale of each ticket is not an individual transaction, rather the occurrence of the sale of a ticket for a game on a given day, regardless of the number of tickets sold, is a transaction). One possible reason for Eight Corners having significantly fewer transaction for the period than Shaw’s could be that it is open fewer days per week.

[0022] Finally, “Store ID” is a unique identifier for the lottery agent in the lottery system.

[0023] As mentioned above, the table of the GUI 200 of FIG. 2 preferably defaults to order the lottery retailers by cumulative sales (or other criterion) for the default time period, as shown in FIG. 2. The lottery data are preferably listed in columns that are reorganizeable. By selecting (e.g., “clicking”) on a column heading 206, the table is reorganized, e.g., reordered, and displayed based upon that heading criterion. For example, if “Transaction (#)” is selected, the retailers are reordered in descending order by number of transactions for the retailers. “Clicking” the heading again reverses the order, i.e., the lottery retailers are ordered in ascending order from the retailer with the lowest number of transactions to the retailer with the highest number of transactions.

Similarly, the chart can be reorganized by city name (e.g., by alphabetical order), by lottery retailer name (e.g., by alphabetical order), by zip code (e.g., numerical order), Index percentage (e.g., numerical order) and store ID (e.g., numerical order) or any other criterion that is provided in the table.

[0024] In one embodiment, selecting a particular retailer name from the "Name" column by "clicking" on the name with a mouse or other interface device opens a map display popup screen 300 as shown in, for example, FIG. 3. The tack icon below the "Center Point" label identifies to the user the location of the retailer on the displayed map. This feature allows a lottery administrator user that must visit a retailer to quickly and easily find directions to the retailer. The map display may be retrieved from map data in data storage unit 106 and be generated originally using the retailer's address and mapping software, such MICROSOFT® MAPPOINT® Web Service from Microsoft Corporation of Redmond, WA.

[0025] In one embodiment, selecting (e.g., "clicking") an Index percentage value from the "Index (%)" column for a particular retailer opens a popup window display 400 that graphically depicts sales information for that specific retailer as shown in, for example, FIG. 4. FIG. 4 shows a display 400 including exemplary graphical depictions of sales for a defined period of time for the retailer Shaw's Northgate, Portland. Exemplary graphs include a pie chart 408 showing the breakdown of sales at that retailer for a selected time period (e.g., January through the current month) and by game, i.e., for the CASHL, MEGA, PICK3, PICK 4, and WCASH games. Monthly sales volume can also be shown as a bar graph for a selected game or games (e.g., "All" games, "Mega Bucks," "Win Cash," "Pick 3," "Pick 4" and "Cash Lotto") as selected using pull down window 412. The line graph 404 (shown in partial) shows the daily sales for the period designated in window 402 and for the game(s) selected using window 412. Different time periods, limited only by the available sales data, may be selected using the pull down window 402. Entering a new time frame in window 402 (such as "last 60 days"), followed by the selection of the "Redraw" button 406 causes the regeneration and redisplay of the line graph 404 of FIG. 4 for the selected time period.

[0026] Referring again to FIG. 2, in one embodiment the display 200 enables the user to enter queries for searching the sales data in the displayed table in order to identify a subset of the retailers that satisfy the at least one criterion selected by the user. Search prompts shown at 208 allow the user to search the sales data for specific information. A sales table is shown in the display 200A of FIG. 5 that has been displayed according to the selected criteria from a user's query. As shown in FIG. 5, the redisplayed table lists retailers having zip codes that "Begin With" the number "041." In order to generate such a chart and referring to the search criteria windows 208 shown above the table, the user selects "zip" from the first pull down window 208a, selects the command "Begins With" from the second pull down window 208b and enters the limitation "041" in the third window 208c. The user then selects the "Start" button 210 to perform the search. The "Paging" window 212 determines how many search results (i.e., retailers) should be listed on any one Web page display. The "Total Sales" 202A and "Average of Transaction" 204A values are also recalculated and displayed in connection with the table based upon the sales data for the subset of retailers that satisfy the search criteria selected by the user. In the example of FIG. 5, the total sales for all retailers located within a zip code that begins with 041 for the defined period of time is "\$1,981,001.50" and the average transaction value is "\$50.45." Similarly, the Index % values for each retailer within the subset – the retailers that satisfy the search criteria – are recalculated relative to the average retailer of the group. Incorporation of a DBMS in the system platform facilitates this expanded search capability.

[0027] The GUI preferably provides the user the ability to search via search prompts 208 by the following exemplary criteria: retailer name, city, zip code, store ID, state (if data for retailers in more than one state is available to the user), game type or any other available sales data. Combinations of search criteria are also preferably available, such that the user is enabled to search, for example, for all retailers located in a combination of zip codes or states in order to define a specific sales territory or region or for all retailers in a specific city or cities by a certain name (e.g., "7 – Eleven"). In one embodiment, this multi-tiered searching may be accomplished by selecting the "Continue" button 214 and adding an additional query using the search prompts 208. The results of the new search, along with recalculated "Total Sales" and "Average of

Transaction” values for the new subset of retailers and respective index percentages, are then displayed in a redisplayed table (not shown).

[0028] As described above, the table of FIG. 2 may be reorganized by a selected criterion by selecting column headings 206 in order to display a table having reordered retailers. This feature may also be used in the search results display of FIG. 5 in order to reorganize the display of the subset of retailers to facilitate customized review of the sales data. The map and sales summary graph features as described above are also available in the display of FIG. 5 by "clicking" or otherwise selecting on the name and Index % value of a retailer, respectively, in FIG. 5.

[0029] In this manner, the system provides the user with a tool that allows the user to define a search of the available sales data to identify sales data particularly relevant to the user's specific purpose such as analyzing sales data for specific time periods, geographic areas, retailers or combinations thereof. This ability allows the user to then make informed assessments on such decisions as sales trends, retailer locations, game comparison and retailer comparisons.

[0030] The GUI display 200 of FIG. 2 also includes "Month", "Quarter" and "Year" elements included in column headings 206. By selecting the "Month" heading, for example, the monthly sales for the retailers are calculated and the retailers are reordered according to the sales for the current month. By selecting the "Quarter" heading, the retailers are reordered according to the sales for the current quarter, and likewise for the "Year" heading.

[0031] Assuming more detailed information is desired, summaries of the sales data indicated in each column can be obtained by selecting the "Summary" button 215 on the GUI of FIG. 2. For example, selecting the column heading "Month" followed by selecting "Summary" button 215 provides the user with a month-by-month summary of the sales volume for each month for the group of retailers shown in the table of FIG. 2 (or for the subset of retailers shown in the table of FIG. 5 as the case may be). FIG. 8 shows a display 800 of a chart indicating month-by-month sales data for each retailer from a group of retailers. Rather than merely showing the cumulative sales of the group per month, an alphabetic list of retailers is provided showing the monthly sales for each

retailer. The percentage of the totals sales of the group for the year that are attributed to each retailer's monthly sales may also be shown.

[0032] As shown in FIG. 8, the retailers from the retailer group are listed in alphabetic order. Assuming the user had already defined an order, such as by selecting a column heading 206 in the display of either FIG. 2 or FIG. 5, selecting the column heading, followed by the "Keeping sorted order" button 216 followed by "Month" (or "Quarter" or "Year") and then "Summary" provides a summary table of sales data per month per the selected "kept" order (e.g., "retailer name"). In a similar fashion, summaries may be obtained by city or zip code on a total, monthly, quarterly, or yearly basis. In relational database terms, the "Summary" function is a "drill-up" data retrieval function. Typically, relational databases only allow for the retrieval to go up one level of data. By combining providing the "Summary" function and "keep sorted order" functions, however, a multi-level drill-up retrieval function is provided. This provides a powerful tool for analyzing the sales data, observing trends, and comparing time periods and regions, particularly in combination with the search functions described above that allow the user to narrow or limit the displayed retailer list according to selected sales data or other information, such as zip code, city or retailer name.

[0033] The "Report" feature of the system is now described. This functionality may be accessed by selecting the "Report" button 220 in FIG. 2, causing the display of the Reporting display 200B of FIG. 6. Once "Report" is selected, a Report GUI 200B showing a comprehensive table like FIG. 2 (i.e., all retailers are listed in an order defined by a default piece of sales data, such cumulative sales) is displayed to the user, only with modified query options as shown in FIG. 6. Like FIG. 2, the retailer list of FIG. 6 may be reorganized by the user by selecting a column heading 206 and may be searched by any combination of available sales data using query windows 208. For example, the table of FIG. 6 shows the subset of retailers having zip codes beginning with "04103." Like the Sales Analysis GUI 200 of FIG. 2, the user may also "click" on an individual retailer's name in the table of FIG. 6 to obtain a map showing the retailer's location (as shown in FIG. 3 for example). Further, by clicking on an Index percentage value

associated with a specific retailer, graphical sales information is displayed to the user (as shown in FIG. 4 for example).

[0034] By selecting the “Show Sales” button 224, a summary of sales (i.e., a sales report”) for the subset of retailers that satisfied the search request and for a time period specified by the user in the date range windows 222 (i.e., January 1, 2002-December 31, 2002) is displayed to the user. An exemplary report 700 is shown in FIG. 7. The report shows detailed sales data for the subset of retailers that satisfied the search criteria. In one embodiment, cumulative sales for the group of retailers are shown for each game for each month during the selected time period. The respective percentage of the total sales attributed to each game may also be displayed.

[0035] As mentioned above, the user preferably can access the aforementioned sales data and functionality via a variety of user devices, such as a computer programmed with a web browser and a PDA or other mobile device. For mobile devices, functionality may be scaled back if bandwidth considerations are a factor. The system should still provide the above-described Sales Analysis and Reporting features. For the Sales Analysis feature, the mobile system preferably enables the user to locate a retailer store by zip code or city, view the location of the retailer store on a map and view the corresponding pie graph, bar graph and/or line graph for a parsed list of retailers (i.e., the subset of retailers provided as the result of a user query) according to the user’s search criteria. For the Report feature, the mobile system preferably at least provides the user the ability to retrieve and view sales information by game type and city or zip code and view a report thereof as described above.

[0036] In one exemplary embodiment, the system also includes a voice recognition server that utilizes natural language voice recognition technology. Voice recognition servers are available from such companies as VoiceGenie Technologies Inc. of Toronto, Ontario, Canada, IBM Corporation of Armonk, New York and Nuance Communications of Menlo Park, California. When a sales person visits a retailer, the sales person may place a call into the voice server, which has access to the sales data in data storage unit 106. The sales person can specify the retailer, and the voice server then recognizes the retailer and retrieves sales data for the retailer from the data storage unit

106. The sales data can then be read to the sales person using a text to speech translation, or the sales data may be directed to the mobile user terminal of the sales person for review. Similar functionality can be achieved using voice responsive systems, also known as Interactive Voice Response (IVR) systems.

[0037] The system and method described herein allow lottery administrators to easily navigate a large amount of sales data and evaluate relevant sales data respective to various lottery ticket sales by lottery retailers, particularly with respect to on-line lottery ticket sales and instant tickets. In so doing, the lottery administrators can evaluate games relative to each other, evaluate retailer performance, and territorial performance. Implementing the system and method via a mobile platform enables lottery administrators to obtain up-to-date and valuable information when in the field (i.e., when visiting retailers), as well as map information to help the administrator locate the retailer.

[0038] The present invention can be embodied in the form of methods and apparatus for practicing those methods. The present invention can also be embodied in the form of program code embodied in tangible media, such as floppy diskettes, CD-ROMs, DVD-ROMs, hard drives, or any other machine-readable storage medium, wherein, when the program code is loaded into and executed by a machine, such as a computer, the machine becomes an apparatus for practicing the invention. The present invention can also be embodied in the form of program code, for example, whether stored in a storage medium, loaded into and/or executed by a machine, or transmitted over some transmission medium, such as over electrical wiring or cabling, through fiber optics, or via electromagnetic radiation, wherein, when the program code is loaded into and executed by a machine, such as a computer, the machine becomes an apparatus for practicing the invention. When implemented on a general-purpose processor, the program code segments combine with the processor to provide a unique device that operates analogously to specific logic circuits.

[0039] Although the invention has been described in terms of exemplary embodiments, it is not limited thereto. Rather, the appended claims should be construed broadly to include other variants and embodiments of the invention that may be made by

those skilled in the art without departing from the scope and range of equivalents of the invention